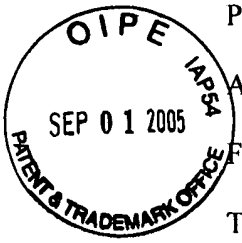
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Patent Application No. 09/914,708

Applicant: Boyd

Filed: December 20, 2001

TC/AU: 1617

Examiner: Gregory W. Mitchell

Docket No.: 213045 (Client Reference No. E-244-1997/3-US-06)

Customer No.: 23460

RESPONSE UNDER 37 CFR 1.116
EXPEDITED PROCEDURE

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 C.F.R. § 1.131 OF MICHAEL R. BOYD

I, Michael R. Boyd, do hereby declare as follows:

1. I am the inventor of the above-referenced patent application.

2. I conceived of and reduced to practice the present invention before February 4, 1999, the publication date of WO 99/05136 A1 (Boyd et al.).

3. As merely an example of both the conception and reduction to practice of the present invention, attached to this Declaration is a true and accurate copy of a report I prepared prior to February 4, 1999, which summarizes research performed under my direction involving the use of lobatamide/salicylihalamide compounds as inhibitors of vacuolar (H+)-ATPases and as therapeutic agents for non-cancer related diseases or conditions involving disordered rates of acidification of intracellular or extracellular compartments.

4. I hereby declare that all statements made herein of my own knowledge are true, that all statements made on information and belief are believed to be true, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001

of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 8/15/05

Michael R. Boyd, M.D., Ph.D.

Specifically, it discloses that the new lobatamide/salicylihalamide class of compounds are highly potent inhibitors of vacuolar (H^+)-ATPases, and therefore adds claims for vacuolar (H^+)-ATPase inhibitory compositions and uses thereof. Since the V-type ATPases are involved in many important physiological processes, pharmacological modulation offers important therapeutic strategies for a number of non-cancer related diseases or conditions involving disordered rates of acidification of intracellular compartments (e.g., as in abnormal vesicular storage and/or processing) or extracellular compartments (e.g., as in abnormalities of bone resorption, such as in osteoporosis).

The only known potent vacuolar (H^+)-ATPase inhibitors are bafilomycins and concanamycins or derivatives thereof. These are very complex molecules and have been synthetically challenging or intractable thus confounding the efforts of several major pharmaceutical companies to successfully develop new drugs based upon inhibition of vacuolar (H^+)-ATPases. The lobatamide/salicylihalamide class of compounds is less complex and much more tractable to synthetic efforts, yet are at least as potent as any of the most potent known bafilomycins or concanamycins.

Inventors' Signatures	*Dates*	*Witnesses' Signatures*	*Dates*
Michael R Boyd		Beverly Bates	